Mobilect™ 39

Mobil Industrial , Mongolia

Electrical insulating oils

Product Description

Mobilect™ 39 is a high quality uninhibited naphthenic mineral insulating oil with very good dielectric properties and oxidation stability intended for transformers, switchgears and other electrical equipment.

Mobilect 39 meets the IEC 60296 (04) specifications and ASTM D1275 / IEC 62535 / DIN 51353 corrosion tests requirements.

Features and Benefits

• Mobilect 39 has reliable oxidation stability and a high resistance to thermal and chemical degradation in the presence of iron and copper, which reduces tendencies to produce sludge and oil-soluble oxidation products. When lower quality oils are used these may form deposits in the transformer and impede heat transfer by interfering with convection currents. In addition deposits may accelerate insulation defects and are often very difficult to remove without complete dismantling.

• Mobilect 39 is specifically treated during manufacture to remove moisture. Water will reduce the electrical insulating properties of the oil and promote oxidation. It is important to remember that a dry oil is hygroscopic and absorbs moisture from the air. It must therefore always be stored in dry conditions and well-closed containers. It is strongly recommended to dry the product before use or use it within short notice after purchasing to avoid long term storage.

• The high dielectric strength of Mobilect 39 is a measure of the resistance of the oil to electric stress and is expressed in kV across a specified gap under test conditions. This is not a measure of the quality of the oil but of the absence of contaminants - especially moisture, fibres and polar chemicals.

• Mobilect 39 has excellent low temperature properties. It is free from wax even at low temperatures and thus circulates freely in outdoor applications. Its low viscosity is excellent for heat transfer.

• The low pour point of Mobilect 39 ensures a free flow in most conditions between the transformer and the conservator and maintains the reliability of tap changers at the lowest temperatures.

• Mobilect 39 is DBDS and PCB free.

• Mobilect 39 is metal passivator and deactivator free.

Applications

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Specifications and Approvals

This product meets or exceeds the requirements of:
IEC 60296 :2012 General Specifications

Properties and Specifications

Property	
Density @ 20C, kg/L, ISO 12185	>0.85

Property	
Kinematic Viscosity @ 40C, cSt, ISO 3104	8-11
Flash Point (PMCC), deg C, ISO 2719	142
Dielectric Dissipation Factor @ 90 C, IEC 60247	<0.001
Breakdown Voltage, kV, IEC 60156	40-60
Corrosive Sulfur, Procedure B, Rating, ASTM D1275	Non Corrosive
Breakdown Voltage, after Treatment, kV, IEC 60156	>70
Oxidation Stability, Sludge, 164 h, 120 C, mass%, IEC 61125-METC	0.1
Oxidation Stability, Total Acidity, 164 h, 120 C, mgKOH/g, IEC 61125-METC	0.4
Interfacial Tension, mN/m, ISO 6295	46
Pour Point, deg C, ISO 3016	-42

Health and safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

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04-2024

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